

**Practice A**

For use with pages 130–136

**Tell whether the given value of the variable is a solution of the equation.**

1.  $8x = 6x - 20$ ;  $x = -10$

2.  $6x - 1 = 3x + 8$ ;  $x = -3$

3.  $-3x - 13 = -7x + 15$ ;  $x = -7$

4.  $-2x + 5 = 7x - 22$ ;  $x = 3$

**Solve the equation. Check your solution.**

5.  $9x = 7x + 22$

6.  $14x - 3 = 10x + 1$

7.  $6x + 5 = 4x - 9$

8.  $10 + 3x = 26 - 5x$

9.  $3(4x - 1) = 12x$

10.  $11 - 2x = 31 - 7x$

11.  $9x - 10 = 5x + 14$

12.  $16x + 21 = 30 + 13x$

13.  $-8x - 1 = -5x + 23$

14.  $4x + 10 = 2(2x + 5)$

15.  $12x - 7 = 5x + 49$

16.  $-4x + 10 = 6x - 40$

**Write the verbal sentence as an equation. Then solve the equation.**17. Five minus 6 times a number is equal to  $-11$  plus 2 times the number.18. Four less than  $-7$  times a number is equal to 13 minus 6 times the number.

19. Eight times a number plus 5 is equal to 5 times the number minus 13.

20. One less than 10 times a number is equal to  $-2$  times the number plus 35.**Find the value of  $x$  for the given square.**

21.



$7 - x$

$19 - 3x$

22.



$8x - 5$

$3x + 20$

23. You and your brother are saving money to buy a camcorder. You already have \$60 saved and your brother has \$45 saved. You plan on saving an additional \$5 each week. Your brother plans on saving an additional \$8 each week. Write and solve an equation to find how many weeks it takes both of you to save the same amount. Let  $w$  represent the number of weeks.

24. The length of a football field including the end zones is 48 feet longer than four times the length of a tennis court. It is also 282 feet longer than a tennis court. Write and solve an equation to find the length (in feet) of a tennis court and a football field. Let  $t$  represent the length of a tennis court.